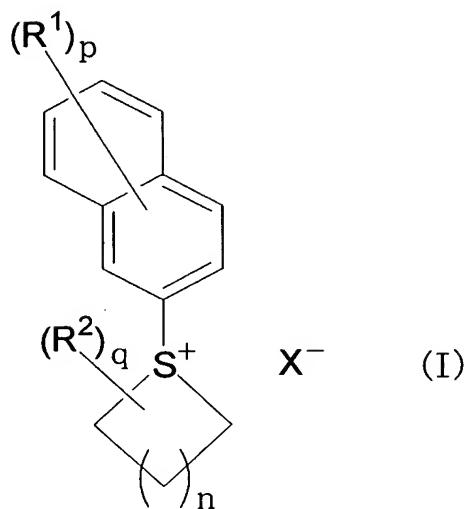


## CLAIMS

1. A sulfonium salt compound shown by the following formula (1),



5    wherein R<sup>1</sup> represents a linear or branched alkyl group having 1-14 carbon atoms, a monovalent hydrocarbon group having an alicyclic skeleton and containing 3-14 carbon atoms, a linear or branched alkoxy group having 1-14 carbon atoms, a group represented by -OR<sup>3</sup> (wherein R<sup>3</sup> is a monovalent hydrocarbon group having an alicyclic skeleton and containing 3-14 carbon atoms), a linear or branched alkyl sulfanyl group having 1-14 carbon atoms, an organic sulfanyl group having an alicyclic skeleton and containing 3-14 carbon atoms, a linear or branched alkane sulfonyl group having 1-14 carbon atoms, or an organic sulfonyl group having an alicyclic skeleton and containing 3-14 carbon atoms, two or more R<sup>1</sup> being either the same or different, R<sup>2</sup> represents a substituted or unsubstituted, linear, branched, or cyclic alkyl group having 1-14 carbon atoms, or two or more R<sup>2</sup> groups bond to form a monocyclic structure having 3-14 carbon atoms or a polycyclic structure having 6-14 carbon atoms, two or more R<sup>2</sup> groups being either the same or different, p is an integer of 0-7, q is an integer of 0-6, n is an integer of 0-3, and X<sup>-</sup> represents a sulfonic acid anion.

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2. The sulfonium-salt compound according to claim 1, wherein the group X<sup>+</sup> in the formula (1) is a sulfonic-acid anion of the following formula (II),



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wherein R<sup>4</sup> represents a substituted or unsubstituted, linear or branched alkyl group having 1-14 carbon atoms or a substituted or unsubstituted, monovalent hydrocarbon group having an alicyclic ring and containing 3-14 carbon atoms.

10        3. The sulfonium-salt compound according to claim 1 or claim 2, wherein p is 0 or 1, q is 0, and n is 2 in the formula (I).

15        4. The sulfonium-salt compound according to claim 1 or claim 2, wherein p is 1, q is 0, n is 2, and R<sup>1</sup> is a linear or branched alkoxy group having 1-14 carbon atoms in the formula (I).

20        5. The sulfonium-salt compound according to claim 1 or claim 2, wherein p is 1, q is 0, n is 2, and R<sup>1</sup> represents -OR<sup>3</sup> (wherein R<sup>3</sup> is a monovalent hydrocarbon group having an alicyclic skeleton and containing 3-14 carbon atoms) in the formula (I).

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6. The sulfonium-salt compound according to claim 1 or claim 2, having a molar extinction coefficient at a wavelength of 193 nm of 10,650 L/mol·cm or less.

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7. A photoacid generator comprising the sulfonium salt compound according

to claim 1.

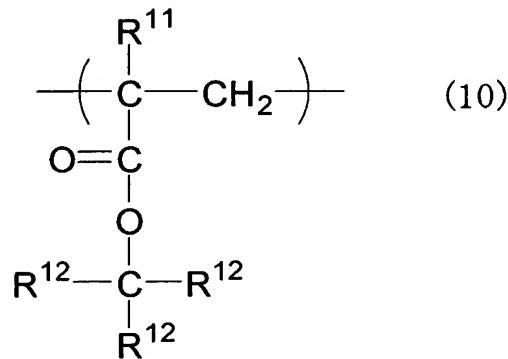
8. A positive-tone radiation-sensitive resin composition comprising (A) a

photoacid generator comprising the photoacid generator according to claim 7 and (B) an acid-dissociable group-containing resin which is insoluble or scarcely soluble in alkali and becomes alkali soluble when the acid-dissociable group dissociates.

9. The positive-tone radiation-sensitive resin composition according to claim 8,

5 wherein the resin of the component (B) has a recurring unit of the following formula

(10),



wherein R<sup>11</sup> represents a hydrogen atom or methyl group and R<sup>12</sup> individually represents a linear or branched alkyl group having 1-4 carbon atoms or a substituted or

10 unsubstituted monovalent alicyclic hydrocarbon group having 3-20 carbon atoms, or any two of R<sup>12</sup> groups form, in combination and together with the carbon atom with which these groups bond, a substituted or unsubstituted, bridged or unbridged, divalent alicyclic hydrocarbon group having 3-20 carbon atoms, with the remaining R<sup>12</sup> group being a linear or branched alkyl group having 1-4 carbon atoms or a substituted or  
15 unsubstituted monovalent alicyclic hydrocarbon group having 3-20 carbon atoms.

10. The positive-tone radiation-sensitive resin composition according to claim 8, wherein the amount of the acid-dissociable groups introduced into the resin (B) is 5-100%.

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11. The positive-tone radiation-sensitive resin composition according to claim 9, wherein any two of the R<sup>12</sup> groups, in the recurring unit of the formula (10) in the

resin (B), form, in combination and together with the carbon atom with which these groups bond, a substituted or unsubstituted, bridged or unbridged, divalent alicyclic hydrocarbon group having 3-20 carbon atoms, with the remaining R<sup>12</sup> group being a linear or branched alkyl group having 1-4 carbon atoms.

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12. The positive-tone radiation-sensitive resin composition according to claim 9, wherein any two of the R<sup>12</sup> groups, in the recurring unit of the formula (10) in the resin (B), form, in combination and together with the carbon atom with which these groups bond, a substituted or unsubstituted, bridged or unbridged, divalent alicyclic hydrocarbon group having 3-20 carbon atoms and the remaining R<sup>12</sup> group is a linear alkyl group having 1-4 carbon atoms.

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13. The positive-tone radiation-sensitive resin composition according to claim 8, wherein the resin of the component (B) has a polystyrene-reduced weight molecular weight determined by gel permeation chromatography of 1,000 to 500,000.

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14. The positive-tone radiation-sensitive resin composition according to claim 8, wherein the resin of the component (B) has a ratio (Mw/Mn) of the polystyrene-reduced weight molecular weight (Mw) to the polystyrene-reduced number average molecular weight (Mn) determined by gel permeation chromatography (GPC) of the resin (B) of 1-5.

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15. The positive-tone radiation-sensitive resin composition according to claim 8, wherein the content of the component (A) is 0.001-70 parts by weight for 100 parts by weight of the component (B).